

ETN MONTHLY NEWS SUMMARY OCTOBER 2017

IN THIS ISSUE:

- ETN October Workshop summary
 - Brief overview
 - High Level User meeting
 - IGTC 2018 Conference Advisory Board meeting
 - Micro Gas Turbine meeting
 - Technical Committee meetings
 - ETN-UK-US Department of Energy collaboration meeting
 - Air Filtration WG meeting
- Call for Papers: 9th International Gas Turbine Conference submit your abstract!
- Sponsorship package for the IGTC 2018 now available exclusively for our members
- ETN at Middle East Rotating Machinery Technology & Innovation Conference
- ETIP SNET Implementation Plan: setting Europe's research priorities for a smarter energy transition
- UNISET Universities in the SET-PLAN
- The SILC Initiative
- Upcoming events

OCTOBER WORKSHOP SUMMARY

Brief overview

At the ETN 2017 Workshop in Genoa, Italy, 120 participants joined to discuss the gas turbine community's needs and requirements, as well as the future research activities. During the first day of the Workshop, high level speakers gave their review on opportunities related to digitalisation as a mean to optimise the operation of power plants, additive manufacturing for onsite components' repair, integration of energy storage in the power plants, the role of hydrogen in the EU energy scenario, and the future direction of gas turbine technology. On the second day, parallel sessions were held to discuss the activities and projects introduced within the ETN Technical Committees, with the aim to start cooperation and further develop the ideas into new initiatives. Besides the Workshop presentations and Technical Committee sessions, several side meetings were also held in Genoa. Overall it was a week of successful and productive meetings, very much appreciated by the members of ETN.

The Workshop presentations and pictures are available on the <u>ETN website</u>. The complete set of meeting minutes will also be available soon. Please note that you need to be logged in before accessing these documents. If you do not have an ETN user account you can create one <u>here</u>.



In case you have any difficulties with your user login please send an email to <u>info@etn-gasturbine.eu</u>.

High Level User meeting

One day ahead of the Workshop, the High Level User meeting was held to review and discuss the current strategy of ETN. During this meeting the Users gave their feedback and suggestions for the Engine Specific User Groups, Technical Committees and Working Groups. The main topics covered in the meeting and the outcomes were highlighted at the opening plenary session of the Workshop.

IGTC 2018 Conference Advisory Board meeting

Following the first Conference Advisory Board (CAB) teleconference call in September, the CAB members held a meeting in Genoa on 4 October. The topics for the IGTC 2018 Call for Papers were finalised (see below) and the structure of the next year's conference was discussed. The CAB members will hold their next teleconference call on 5 December 2017.

Micro Gas Turbine meeting

The Micro Gas Turbine standardisation meeting was held in Genoa in the morning of 4 October. The minutes of the meeting are available on our website.

Technical Committee meetings

On 5 October the ETN Technical Committees were divided into parallel sessions where TC members met and discussed the following projects:

- TC1 Low Carbon Gas Turbine Operations: the OMSoP project; the role of mGT CHP in future Smart City; Supercritical-CO₂ cycles for gas turbines; Definition of standard mission profile for heavy duty gas turbines in EU.
- TC2 Operational and Fuel Flexibility: Challenges and opportunities for GT combustion systems; Requirements from the gas turbine user community; Ammonia combustion in GT; Fuel and Operational Flexibility through the application of sequential combustion.
- TC3 Material Degradation, Repair Technologies and Manufacturing: Additive manufacturing; Hot Corrosion; Efficiency of water washing systems; Research activities on material in EU projects; OAG-IGD GT R1 Blades failure RCA analysis.
- TC4 Condition Monitoring and Instrumentation & TC5 Asset Management: Asset Remnant Life Assessment and ways for extensions; White Paper Digitalisation in Gas Turbine sector.

In the framework of the Technical Committee 2, ETN will launch an interest group on NH₃ combustion. The objective of this group is to gather information for defining new projects or finding new partners with an interest in the topic. ETN is also launching a working group for Users to address hot corrosion, one of the main cause of damage on gas turbine hot gas path, particularly in the off-shore or coastal regions. The first teleconference call is scheduled for 27 November. For more information on these initiatives please contact Matthieu Pawlik: mp@etn-gasturbine.eu.



ETN-UK-US Department of Energy collaboration meeting

The ETN-UK-US Department of Energy collaboration meeting was held in Genoa on 5 October. In this meeting the representatives of the UK and US Department of Energy explained the objectives of the ongoing tasks. ETN Members were asked to provide a summary of topics of interest and potential contribution to the programme by 17 November 2017. Please contact Ugo Simeoni for more information: us@etn-gasturbine.eu.

Air Filtration WG meeting

The Air Filtration Working Group held a meeting in Genoa on 6 October. The presentations and meeting minutes are available on <u>our website</u>.

<u>Call For Papers: 9th International Gas Turbine Conference – Submit Your</u> abstract!

The ETN Conference Advisory Board publishes the Call for Papers for the 9th International Gas Turbine Conference, which will take place 10-11 October 2018 in Brussels. Submitted papers should demonstrate a high importance and interest to the gas turbine user community and should be related to one of the following categories:

- Operations & Maintenance
- Manufacturing & Repair
- New Component Developments
- Next Generation Technologies

The deadline to submit abstracts is 4 December 2017. See more information on the Paper topics and rules for the submission on ETN website.

SPONSORSHIP PACKAGE FOR THE IGTC 2018 NOW AVAILABLE - EXCLUSIVELY FOR OUR MEMBERS

The sponsorship opportunities for the International Gas Turbine Conference 2018 are now available, for a limited time only for the ETN members. The IGTC-18 will provide an exclusive opportunity to gain visibility and explore future partnerships at this renowned biennial conference. See the available options for the conference and expo on <u>our website</u>, and secure your visibility or expo space before the sponsorship opportunities are opened to external partners and audience by 10 January 2018.

ETN AT MIDDLE EAST ROTATING MACHINERY TECHNOLOGY & INNOVATION CONFERENCE

ETN participated on 10-12 October 2017 in the Middle East Rotating Machinery Technology & Innovation conference, held in Dubai, United Arab Emirates, where ETN President Bernard Quoix delivered a keynote opening speech. Bernard Quoix took this opportunity to raise the awareness of the importance and the criticality of rotating machinery in the Oil & Gas and power generation industry, and highlighted the main requirements in terms of technology and innovation. He also introduced ETN and our activities, and invited the local user community to join our Network. It was a two day event with a mix of presentations by users from the Middle



East highlighting issues and sharing their experiences with manufacturers/suppliers presenting their services and solutions to frequent problems in this region. As it is a user driven conference with the support of the local user community and government, ETN believes it is a conference that we could build on, enlarge and take to a new level through a wider cooperation. ETN is currently discussing a potential cooperation for the next edition.

ETIP SNET IMPLEMENTATION PLAN: SETTING EUROPE'S RESEARCH PRIORITIES FOR A SMARTER ENERGY TRANSITION

The ETIP-SNET Governing Board, in which ETN is represented by ENGiE, held a meeting in Brussels on 26 September. During the meeting the Implementation Plan 2017-2020 was discussed. The following four overarching key priorities for future R&I projects have been identified from 39 different "topics":

- High-Renewable Energy Sources (RES) and Empowered End-User Energy System: Governance and Market Design.
- Digitalisation of the Energy System
- Integrated Grid with Improved Interfaces between Energy System Components
- Improved Components of the Energy System

Following the public consultations done during the summer, to which ETN submitted comments on the Thermal Power Generation topics, it was discussed whether the related topics should also consider decentralised power generation parallel to centralised thermal power generation. As a result it was agreed to amend the description of the topics and include also research activities to better integrate decentralised thermal power generation technologies in the smart networks. The Implementation Plan can be accessed on <u>our website</u> (under the "Action 4").

UNISET - UNIVERSITIES IN THE SET-PLAN

On 23-24 October 2017 the High-level Conference of UNI-SET (Universities in the SET-Plan) took place in Brussels. UNI-SET aims at identifying opportunities for universities to engage in new research projects tackling energy-related challenges, as well as to foster the creation of new master's programmes for better employability of university graduates. It seeks to reduce fragmentation of European universities' research, education and training capacity in addressing the societal challenge of the "energy transition". In the long term, UNI-SET intends to act as a sustainable open platform that mobilises universities and creates synergies between the universities and other stakeholders in the SET-Plan process. The UNI-SET partners have drafted a "Roadmap for European Universities in Energy", which identifies the actions to be taken to achieve the objectives of the programme. Further information about the programme can be found here.

THE SILC INITIATIVE

On 25 October 2017 ETN attended the conference "Innovation in low-carbon solutions – The SILC Initiative". The conference, organised by the European Commission, had the objective to discuss research and innovation projects for the industry, following the "Renewed EU Industrial Policy Strategy" that will help the industry to stay or become the world leader in innovation,



digitisation and decarbonisation. In this context, the Sustainable Industry Low Carbon Initiative (SILC) – implemented in two funding programmes, SILC I and SILC II – financially supports energy intensive industries in developing, demonstrating and disseminating low-carbon solutions and promoting their adoption within and across sectors. The solutions developed, which include process optimisation, implementation and demonstration of new systems, development of new products, development of best practice guidelines and knowledge hubs, and development of new financing models, are not plant specific and have a great potential for replication in several sectors. The SILC initiative is in line with the Implementation Plan of SET-Plan Action 6 – Energy Efficiency in Industry, to which ETN has contributed as reported in our previous Monthly News Summary. Further information about the initiative can be found via the following link.

UPCOMING EVENTS:

ETN internal meetings:

2017

- ➤ Hot Corrosion Working Group teleconference call: 27 November
- **ETN Board meeting:** 19 December 2017, Brussels, Belgium

2018

- > IGTC-18 Conference Advisory Board meeting: January (date tbc), Brussels, Belgium
- > ETN Project Board and TC Chair meeting, January (date tbc), Brussels, Belgium
- **ETN Annual General Meeting**: 14-15 March 2018, (venue tbc)
- ➤ Industrial RB211 User Group meeting: May 2018, (date and venue tbc)
- ➤ LM2500 User Group meeting: June 2018, (date and venue tbc)
- International Gas Turbine Conference 2018: 10-11 October 2018, Brussels, Belgium

Other meetings and conferences:

2017

- Free webinars organised by OPRA TURBINES: 1 & 21 November 2017
- ➤ GTI 2017 The EVI-GTI Conference on Gas Turbine Instrumentation: 28-30 November 2017, Amsterdam, The Netherlands
- > <u>SET Plan The 10th Year Anniversary Central European Energy Conference 2017</u>: 29 November 1 December 2017, Bratislava, Slovakia

Keep updated with ETN's most recent news – follow ETN on Twitter: <u>@etngasturbine</u> and on LinkedIn!

ETN Monthly News Summary is distributed internally to ETN members at the end of each month. ETN Quarterly Newsletter is circulated to members and external contacts four times a year. The next edition will be January-March 2018. You can find all the previous issues of both publications on www.etn-gasturbine.eu/publications!